Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A rotary sprinkler, which comprises:

(a) a drive housing that encloses an oscillating drive having at least one movable arc limit stop that can be selectively moved by a user to adjust an angular extent of an arc segment;

(b) a rotary nozzle assembly carried on the drive housing and coupled to the drive located within the drive housing, wherein the rotary nozzle assembly is oscillated by the drive back and forth relative to the drive housing to water the adjustable arc segment; and

(c) an arc indicator carried on an exterior of the drive housing and operatively coupled to the movable arc limit stop within the drive housing to visually indicate to a user both the angular extent and absolute direction of the arc segment.

2. (original) The rotary sprinkler of claim 1, wherein the drive housing and the drive which the drive housing encloses, the rotary nozzle assembly, and the arc indicator are all part of a pop-up sprinkler riser carried within a sprinkler body.

3. (original) The rotary sprinkler of claim 1, wherein the arc indicator comprises an indicator band having a portion which is visible to the user with the visible portion of the

indicator band having a length which is representative of the angular extent of the arc segment.

4. (original) The rotary sprinkler of claim 3, wherein the ends of the visible portion of the indicator band are continuously aligned with spaced side boundaries of the arc segment to absolutely indicate the direction of the arc segment relative to a fixed reference regardless of the nozzle assembly's instantaneous position relative to the drive housing.

5. (original) A rotary sprinkler, which comprises:

(a) an oscillating drive for watering an arc segment on the ground, wherein the arc segment has an angular extent between spaced side boundaries of the arc segment which angular extent is determined by an arc of rotation provided by the oscillating drive, wherein the arc of rotation provided by the oscillating drive is determined by an angular distance between two arc limit stops, and wherein the two arc limit stops are angularly adjustable relative to one another to adjust the angular distance between the two arc limits and thereby to adjust the arc of rotation provided by the oscillating drive to adjust the angular extent of the arc segment;

(b) a rotary nozzle assembly coupled to the drive such that the rotary nozzle assembly is oscillated by the drive back and forth to water the adjustable arc segment; and

(c) an arc indicator having two sides with each side of the arc indicator remaining aligned with one of the side boundaries of the arc segment regardless of the rotary nozzle assembly's instantaneous position during oscillation of the rotary nozzle assembly to absolutely indicate to the user the arc segment's direction, and wherein the angular distance between the sides of the arc indicator corresponds to the

angular distance between the two arc limit stops to represent the angular extent of the arc segment.

6. (original) The rotary sprinkler of claim 5, wherein the two arc limit stops comprise one fixed arc limit stop and one movable arc limit stop, wherein the movable arc limit stop is angularly adjustable towards and away from the fixed arc limit stop to provide the relative angular adjustment between the two arc limit stops.

7. (original) The rotary sprinkler of claim 6, wherein the two sides of the arc indicator comprise a fixed side aligned with the fixed arc limit stop and a movable side aligned with the movable arc limit stop.

8. (original) The rotary sprinkler of claim 7, wherein the movable side of the arc indicator is operatively coupled to the movable arc limit stop to move in concert with the movable arc limit stop.

9. (original) The rotary sprinkler of claim 7, wherein the arc indicator comprises a continuous indicator band having visible ends, and wherein the fixed and movable sides of the arc indicator comprise the visible ends of the indicator band.

10. (original) The rotary sprinkler of claim 9, wherein the indicator band has a contrasting color relative to adjacent portions of the sprinkler to allow the indicator band to be more easily seen.

11. (original) The rotary sprinkler of claim 7, wherein the arc indicator comprises:

(a) a scale having a zero mark and spaced degree markings; and

(b) a movable pointer that can be read against the scale;

and wherein the fixed and movable sides of the arc indicator comprise the zero mark of the scale and the movable pointer, respectively.

12. (original) A rotary sprinkler, which comprises:

(a) a nozzle assembly for ejecting water from the sprinkler;

(b) an oscillating drive operatively coupled to the sprinkler for oscillating the nozzle assembly back and forth through an arc of rotation to water an arc segment with the arc segment having an angular extent determined by the arc of rotation through which the nozzle assembly oscillates, wherein the oscillating drive is adjustable to vary the angular extent of the arc segment; and

(c) an arc indicator comprising an indicator band having a visible length which varies in accordance with the angular extent of the arc segment such that the indicator band appears longer as the angular extent of the arc segment increases and the indicator band appears shorter as the angular extent of the arc segment decreases whereby the visible length of the indicator band visually represents the angular extent of the arc segment.

13. (original) The rotary sprinkler of claim 12, wherein the indicator band has a contrasting color with respect to adjacent portions of the sprinkler to allow the indicator band to be more easily seen.

14. (original) The rotary sprinkler of claim 12, wherein the sprinkler includes a housing that is non-rotatable during oscillation of the nozzle assembly, and wherein the in-

dicator band is carried on the housing such that it does not move with the nozzle assembly during oscillation of the nozzle assembly but remains stationary relative to the nozzle assembly.

15. (original) The rotary sprinkler of claim 14, wherein the visible length of the indicator band is oriented on the housing to point where the arc segment being watered by the nozzle assembly is located on the ground.

16. (original) The rotary sprinkler of claim 12, wherein the indicator band circumferentially extends around the sprinkler over a circumferential distance encompassing a maximum value provided for the arc segment, and wherein the visible length of the indicator band is provided by an adjustment member that is movable relative to the indicator band to progressively uncover the indicator band from a first end thereof towards a second end thereof as the angular extent of the arc segment progressively increases, whereby the visible length of the indicator band is formed by the uncovered portion of the indicator band.

17. (original) The rotary sprinkler of claim 16, wherein the adjustment member includes an interior annular channel that is accessible through a slot in the adjustment member with the channel being configured to substantially cover and hide that portion of the indicator band received inside the channel, wherein the first end of the indicator band has a fixed engagement with the sprinkler outside of the annular channel with the indicator band extending circumferentially away from the first end of the indicator band to pass through the slot and to be wound around and received inside the annular channel, and wherein the indicator band is un-

covered by rotation of the adjustment member relative to the indicator band such that more and more of the indicator band is located outside of the channel to be visible while less and less of the indicator band is hidden inside the channel as the arc segment increases, and vise versa.

18. (original) The rotary sprinkler of claim 17, wherein the oscillating drive is adjustable by angularly adjusting two arc limit stops relative to one another by angularly moving at least one of the arc limit stops towards and away from the other arc limit stop, and wherein the adjustment member carrying the interior annular channel is part of an arc adjustment member that is operatively coupled to the at least one movable stop such that the indicator band is progressively covered and uncovered by the adjustment member as the at least one movable stop is moved towards and away from the other arc limit stop.

19. (original) The rotary sprinkler of claim 16, further including a transparent window overlying and covering the indicator band the adjustment member.

20. (original) The rotary sprinkler of claim 12, wherein the indicator band is carried on an exterior portion of the sprinkler.

21. (original) The rotary sprinkler of claim 19, wherein the indicator band is carried on an exterior portion of the sprinkler that is visible to an observer during oscillation of the nozzle assembly.

22. (original) The rotary sprinkler of claim 19, wherein the indicator band is carried around a cylindrical housing of the sprinkler.

23. (original) The rotary sprinkler of claim 12, wherein the visible length of the indicator band at a maximum length thereof extends 360°.

24. (original) The rotary sprinkler of claim 12, wherein the visible length of the indicator band extends circumferentially around a cylindrical housing of the sprinkler.

25. (original) The rotary sprinkler of claim 24, wherein the cylindrical housing around which the visible length of the indicator band circumferentially extends is a housing that remains rotationally stationary during oscillation of the nozzle assembly.

26. (original) An arc indicator for a rotary sprinkler having an oscillating drive which drive is adjustable to vary the angular extent of an arc segment being watered by the sprinkler, which comprises:

(a) an indicator band having a visible portion that has a length which is related to the angular extent of the arc segment; and

(b) an adjustment member that moves relatively to the indicator band and in concert with an increase and decrease in the angular extent of the arc segment to increase and decrease the length of the visible portion of the indicator band in concert with an increase and decrease in the angular extent of the arc segment.

27. (currently amended) An arc indicator for a rotary sprinkler having an oscillating drive which drive is adjustable to vary the angular extent of an arc segment being watered by the sprinkler, which comprises:

an indicator band having a visible angular length that is substantially equal to and varies with the angular extent of the arc segment as the angular extent of the arc segment is adjusted ~~such that the visible angular length of the indicator band is 30° when the angular extent of the arc segment is 30°, is 45° when the angular extent of the arc segment is 45°, and so on~~.

28. (original) A rotary sprinkler which has adjustable part circle operation, which comprises:

(a) an oscillating, reversible drive for providing oscillating rotation during part circle operation, wherein the drive includes two angularly spaced arc limit stops that provide torque to a shiftable toggle member to toggle the toggle member to reverse the drive;

(b) a rotary nozzle assembly coupled to the drive for rotation therewith; and

(c) a stop assembly which is rotationally adjustable relative to the toggle member, wherein the stop assembly carries one arc limit stop and the toggle member carries the other arc limit stop such that rotational adjustment of the stop assembly relative to the toggle member moves the one arc limit stop angularly towards and away from the other arc limit stop to provide for adjustable part circle operation, the one arc limit stop normally being disengaged from the toggle member to allow for rotational movement of the stop assembly to provide angular adjustment of the one arc limit stop relative to the other arc limit stop but momentarily engaging the toggle member when the one arc limit stop is engaged by a trip tab to reverse the drive.

29. (original) The rotary sprinkler of claim 28, wherein the one arc limit stop is momentarily engaged to the toggle member by a pivotal pawl.

30. (original) The rotary sprinkler of claim 29, wherein the toggle member includes a serrated section, and wherein the pivotal pawl pivots to engage the serrated section to momentarily engage the one arc limit stop to the toggle member.

31. (original) The rotary sprinkler of claim 30, further including:

(a) a spring for biasing the pawl in a direction in which the pawl engages the serrated section of the toggle member; and

(b) a cam acting on the pawl to normally prevent the bias exerted on the pawl by the spring from pivoting the pawl.

32. (original) The rotary sprinkler of claim 31, wherein the cam releases the pawl when the pawl is engaged by the trip tab to allow the bias exerted on the pawl by the spring to pivot the pawl.

33. (original) The rotary sprinkler of claim 32, wherein the cam reengages the pawl after drive reversal to pivot the pawl in a reverse direction to disengage the pawl from the serrated section of the toggle member.

34. (original) The rotary sprinkler of claim 29, wherein the toggle member is cylindrical with a serrated section being located on an interior diameter of the cylindrical toggle member, and wherein the stop assembly has a portion which carries the pivotal pawl with the pawl carrying portion of the stop assembly being concentrically received inside the cylindrical toggle member such that the pawl pivots radially

outwardly relative to the stop assembly to engage the serrated ring.

35. (original) The rotary sprinkler of claim 34, wherein the pawl carrying portion of the stop assembly comprises a stop plate which stop plate also carries the one arc limit stop.

36. (original) The rotary sprinkler of claim 35, further including a torsion spring for normally biasing the pawl into an engaged position in which the pawl engages the serrated section of the toggle member, the pawl having a cam surface which cooperates with a cam on an adjacent portion of the stop assembly such that the cam normally bears against the cam surface on the pawl to pivot the pawl against the bias of the torsion spring into a disengaged position in which the pawl is disengaged from the serrated section of the toggle member.

37. (original) The rotary sprinkler of claim 36, wherein engagement of the one arc limit stop by the trip tab moves the cam surface on the pawl out of engagement with the cam to allow the torsion spring to pivot the pawl from the pawl's disengaged position into the pawl's engaged position.

38. (original) The rotary sprinkler of claim 36, wherein the cam is carried on a ring overlying the stop plate with the stop plate being angularly shiftable relative to the ring by an amount sufficient to disengage the cam surface on the pawl from the cam on the ring.

39. (original) The rotary sprinkler of claim 34, wherein the serrated section comprises a serrated ring on an interior diameter of the cylindrical toggle member.

40. (original) A rotary sprinkler which is adjustable between part circle and full circle operation, which comprises:

(a) an oscillating, reversible drive for providing oscillating rotation during part circle operation, wherein the drive includes two angularly spaced arc limit stops that cooperate with a trip mechanism for shifting the drive to reverse the drive;

(b) a rotary nozzle assembly coupled to the drive for rotation therewith;

(c) an angularly adjustable stop assembly carrying one arc limit stop to allow the one arc limit stop to be angularly moved towards and away from the other arc limit stop to provide for adjustable part circle operation; and

(d) wherein the one arc limit stop automatically moves vertically whenever the one arc limit stop is spaced 360° from the other arc limit stop to move the one arc limit stop vertically out of engagement with the trip mechanism to thereafter provide full circle operation of the drive.

41. (original) The rotary sprinkler of claim 40, further including a spring for vertically biasing the one arc limit in a first vertical direction to bias the one arc limit stop into a position in which it is vertically out of engagement with the trip mechanism, and wherein a tab is normally provided on an adjacent portion of the sprinkler for pushing the one arc limit stop in a second direction opposite to the first direction into a position where the one arc limit stop will normally engage the trip mechanism to provide part circle operation.

42. (original) The rotary sprinkler of claim 41, wherein the one arc limit stop is carried on a stop plate,

wherein the spring biases the stop plate in the first direction, and wherein the tab pushes on the stop plate in the second direction.

43. (original) The rotary sprinkler of claim 42, wherein the tab pushes on the stop plate by pushing on a full circle ring interposed between the tab and the stop plate.

44. (original) The rotary sprinkler of claim 43, wherein the full circle ring includes a cut-out or notch, and wherein the tab on the adjacent portion of the sprinkler enters into the cut-out or notch whenever the one arc limit stop is spaced 360° from the other arc limit stop to allow the spring to move the stop plate and the full circle ring vertically sufficiently far to move the one arc limit stop on the stop plate vertically out of engagement with the trip mechanism.

45. (original) The rotary sprinkler of claim 44, wherein the tab has a slanted cam surface such that when the one arc limit stop is adjusted to be less than 360° from the other arc limit the slanted cam surface will force the tab out of the cut-outs or notch to allow the tab to ride up onto the full circle ring to again push the full circle ring and the stop plate in the second direction against the bias of the spring.

46. (original) The rotary sprinkler of claim 44, further including a plurality of spaced tabs on the adjacent portion of the spring received in a plurality of spaced cut-outs or notches on the full circle ring whenever the one arc limit stop is spaced 360° from the other arc limit stop.

47. (original) The rotary sprinkler of claim 41, wherein the spring is a torsion spring.

48. (original) The rotary sprinkler of claim 41, wherein each tab provided on the adjacent portion of the sprinkler enters into a cut-out or notch provided in a portion of the adjustable stop assembly to allow the portion of the stop assembly having the cut-outs or notches to move vertically in the first direction under the influence of the spring, such motion in the first direction of the portion of the stop assembly allowing the one arc limit stop to also move vertically into a position in which the one arc limit stop is vertically out of engagement with the trip mechanism.

49. (currently amended) A rotary sprinkler which has adjustable part circle operation, which comprises:

(a) an oscillating, reversible drive for providing oscillating rotation during part circle operation;

(b) a rotary nozzle assembly coupled to the drive for rotation therewith; and

(c) a buckling spring assembly having first and second over-center, bi-stable positions with the buckling spring assembly being in the first bi-stable position when the drive provides rotation to the nozzle assembly in a first direction and with the buckling spring assembly being in the second bi-stable position when the drive provides rotation to the nozzle assembly in a second direction which is opposite to the first direction; and

(d) ~~, wherein~~ wherein the buckling spring assembly comprises:

(i) a compression spring having opposite ends;

(ii) first and second pivot members that are spaced from one another with the pivot members having

pins or dowels that generally face one another, wherein the opposite ends of the compression spring are received on the facing pins or dowels such that the compression spring extends between and is connected to the first and second pivot members; and

(iii) wherein pivoting motion of the first pivot member relative to the second pivot member causes the compression spring to buckle between the ends of the spring as the buckling spring assembly moves from one bi-stable position towards another bi-stable position with such buckling motion of the compression spring then causing the second pivot member to pivot to reverse the drive.

50. (original) The rotary sprinkler of claim 49, wherein the first and second pivot members are carried on a common base plate.

51. (original) The rotary sprinkler of claim 51, wherein the first and second pivot members pivot on pivot pins that are carried on the base plate with the pivot pins beings spaced apart from one another on the base plate and with the pivot pins being parallel to one another.

52. (original) The rotary sprinkler of claim 51, wherein the pivot pins are perpendicular to the dowels or pins which receive the ends of the compression spring.

53. (original) A rotary sprinkler which has adjustable part circle operation, which comprises:

(a) an oscillating, reversible drive for providing oscillating rotation during part circle operation;

(b) a rotary nozzle assembly coupled to the drive for rotation therewith; and

(c) a buckling spring assembly having first and second over-center, bi-stable positions with the buckling spring assembly being in the first bi-stable position when the drive provides rotation to the nozzle assembly in a first direction and with the buckling spring assembly being in the second bi-stable position when the drive provides rotation to the nozzle assembly in a second direction which is opposite to the first direction; and

(d) ~~, wherein~~ wherein the buckling spring assembly comprises:

(i) a common base plate;

(ii) first and second pivot members pivotally connected to the base plate by first and second pivot pins that extend outwardly from one side of the base plate with the first and second pivot pins being parallel to one another, wherein the first pivot member is pivotally received on the first pivot pin and the second pivot member is pivotally received on the second pivot pin and when the first and second pivot pins are so received they are spaced from one another along the base plate; and

(iii) a compression spring extending along the base plate with the compression spring having first and second ends, wherein the first end of the compression spring is attached to the first pivot member and the second end of the compression spring is attached to the second pivot member with an intermediate portion of the compression spring being unsupported such that the compression spring can buckle between its ends in the intermediate portion of the compression spring as the first pivot member is pivoted relative to the second pivot member.

54. (original) The rotary sprinkler of claim 53, wherein the first and second ends of the springs are connected

to the first and second pivot members by virtue of each spring end being received around a dowel or pin carried on one of the pivot members.

55. (original) A method of manufacturing rotary gear drives for a rotary sprinkler which drives provide both continuous and intermittent rotation, which comprises:

(a) manufacturing a continuous version of the sprinkler drive which comprises providing:

(i) a turbine at a lower end of the drive;

(ii) a gear train including a plurality of speed reducing gear stages stacked above the turbine with the gear stages being located in a gear case, the turbine being operatively coupled to the gear train to rotate the gear train including its speed reducing gear stages when the turbine is rotated at a particular speed by water flowing past the turbine;

(iii) an output gear located outside of the gear case and operatively connected to the gear train such that the output gear has a slower rotational speed than that of the turbine; and

(iv) wherein the gear train comprises a plurality of normal gears with regularly shaped teeth to provide continuous rotation of the output gear; and

(b) manufacturing an intermittent version of the sprinkler drive which comprises manufacturing the continuous version of the sprinkler drive except that multilated gears are used in place of some of the normal gears in the gear train of the continuous version of the sprinkler drive.

56. (original) A friction clutch for preventing damage to a rotary drive of a rotary sprinkler during periods of

forced rotation of a nozzle assembly of the sprinkler, which comprises:

(a) a driving gear on the rotary drive which driving gear is provided with a cylindrical hub having a plurality of vertically extending teeth;

(b) a driven member fixed to the nozzle assembly, the driven member also having a cylindrical hub with a plurality of vertically extending teeth;

(c) wherein the cylindrical hubs on the driving gear and the driven member are concentrically positioned relative to one another with one hub concentrically received inside the other hub such that an annular channel is formed between the hubs, and wherein the vertically extending teeth on the two hubs are located on radially inner and outer sides of the channel, respectively, with the teeth of one hub on one side of the channel being spaced from the teeth of the other hub on the other side of the channel so that the teeth of one hub on one side of the channel do not directly engage the teeth of the other hub on the other side of the channel; and

(d) a friction material arranged in the channel between the two hubs to transfer torque from the driving gear to the driven member to rotate the nozzle assembly, the friction material normally transferring torque between the driving gear and the driven member but allowing the driven member to slip relative to the driving gear to prevent damage to the rotary drive when torque above a certain level is imposed on the driven member by forced nozzle rotation.

57. (original) The rotary sprinkler of claim 56, wherein the friction material is an annular ring received in the channel between the hubs.

58. (original) The rotary sprinkler of claim 57, wherein the annular ring is made of an elastomeric material.

59. (original) The rotary sprinkler of claim 58, wherein the ring is selected in conjunction with the spacing between the teeth to provide transfer of all torque below a first force level but to allow slipping at torque above a second force level.

60. (original) The rotary sprinkler of claim 59, wherein the ring is pre-lubricated in a high viscosity lubricating oil such that the pre-lubricated ring in conjunction with the spacing between teeth provides transfer of all torque below the first force level but allows slipping at torque above the second force level.

61. (original) The rotary sprinkler of claim 59, wherein the first force level is approximately 4 inch pounds of force and the second force level is approximately 6 inch pounds of force.

62. (original) The rotary sprinkler of claim 59, wherein the lubricating oil has approximately the following viscosity:

	CST	SUS
100° F	54-58	234-258
210° F	10-11.5	49.7-54.9.

63. (original) The rotary sprinkler of claim 56, wherein the vertically extending teeth on the two hubs are asymmetrically arranged relative to one another.

64. (original) The rotary sprinkler of claim 63, wherein the teeth on one hub are spaced around the one hub at

regular circumferential intervals while the teeth on the other hub are spaced around the other hub at non-constant circumferential intervals.

65. (original) A friction clutch for preventing damage to a rotary drive of a rotary sprinkler during periods of forced rotation of a nozzle assembly of the sprinkler, which comprises:

(a) driving and drive members having annular arrays of clutch teeth that are concentrically arranged relative to one another with one annular array of clutch teeth being concentrically received inside the other annular array of clutch teeth;

(b) an elastomeric O-ring located between the annular arrays of clutch teeth to transfer torque between the annular arrays of clutch teeth to thereby cause the driving member to drive the driven member;

(c) and wherein the clutch teeth in one annular array of teeth are spaced at non-constant circumferential intervals.

66. (original) The rotary sprinkler of claim 65, wherein the clutch teeth in the other annular array of teeth are spaced at constant circumferential intervals.

67. (original) The rotary sprinkler of claim 66, wherein the non-constant circumferential intervals are irregular.

68. (currently amended) A friction clutch for preventing damage to a rotary drive of a rotary sprinkler during periods of forced rotation of a nozzle assembly of the sprinkler, which comprises:

(a) driving and drive members having ~~annular~~ arrays of clutch teeth that are ~~concentrically arranged relative~~ adjacent to one another with one ~~annular~~ array of clutch teeth ~~being concentrically received inside~~ facing the other ~~annular~~ array of clutch teeth;

(b) an elastomeric O-ring located between the ~~annular~~ arrays of clutch teeth to transfer torque between the ~~annular~~ arrays of clutch teeth to thereby cause the driving member to drive the driven member; and

(c) ~~and~~ wherein the clutch teeth in the ~~annular~~ arrays of teeth are asymmetrical relative to one another.

69. (currently amended) A friction clutch for preventing damage to a rotary drive of a rotary sprinkler during periods of forced rotation of a nozzle assembly of the sprinkler, which comprises:

(a) driving and drive members having ~~annular~~ arrays of clutch teeth that are ~~concentrically arranged relative~~ adjacent to one another with one ~~annular~~ array of clutch teeth ~~being concentrically received inside~~ facing the other ~~annular~~ array of clutch teeth;

(b) an elastomeric O-ring located between the ~~annular~~ arrays of clutch teeth to transfer torque between the ~~annular~~ arrays of clutch teeth to thereby cause the driving member to drive the driven member;; and

(c) wherein the O-ring is pre-lubricated in a high viscosity lubricating oil.

70. (original) A nozzle assembly for a rotary sprinkler in which the nozzle assembly ejects a stream of water to one side of the nozzle assembly as the nozzle assembly is rotated by a rotary drive, which comprises:

(a) a nozzle housing;

(b) a nozzle cradle pivotally carried on the nozzle housing for pivoting motion relative to the nozzle cradle about a substantially horizontal pivot axis;

(c) a nozzle carried in the nozzle cradle with the nozzle having an outlet for ejecting a stream of water, wherein the trajectory of the water stream ejected by the nozzle is raised and lowered as the nozzle cradle is pivoted upwardly and downwardly; and

(d) a radius adjustment screw carried in the nozzle cradle such that a lower end of the radius adjustment screw can move progressively out of and into the water stream exiting from the nozzle as the radius adjustment screw is screwed up and down on the nozzle cradle, the radius adjustment screw moving with the nozzle cradle as the nozzle cradle is pivoted upwardly and downwardly relative to the nozzle housing such that the radius adjustment screw once adjusted maintains a constant position relative to the nozzle even as the trajectory of the nozzle is adjusted.

71. (original) The rotary sprinkler of claim 70, wherein the nozzle is removable from the nozzle cradle to allow nozzles with differently sized outlets to be installed in the nozzle cradle.

72. (original) The rotary sprinkler of claim 70, wherein the nozzle cradle has a seat which receives a screw or worm on a trajectory setting shaft, rotation of the shaft acting through the screw or worm against the seat to pivot the nozzle cradle upwardly and downwardly depending upon the direction of rotation of the trajectory setting shaft.

73. (original) The rotary sprinkler of claim 72, wherein the trajectory setting shaft extends to an exterior of

the nozzle housing so that the trajectory setting shaft can be rotated from exteriorly of the nozzle housing.

74. (original) The rotary sprinkler of claim 72, wherein the nozzle housing includes a top with the trajectory setting shaft being accessible from or through the top such that the trajectory setting shaft can be rotated from above the top of the nozzle housing.

75. (original) The rotary sprinkler of claim 70, wherein the nozzle cradle carries curved tabs with one curved tab extending outwardly from each side of the nozzle cradle, and wherein the curved tabs on the nozzle cradle are captured within curved slots provided in the nozzle housing to pivotally journal the nozzle cradle within the nozzle housing, the tabs sliding up and down in the slots as the nozzle cradle pivots.

76. (original) The rotary sprinkler of claim 70, wherein the radius adjustment screw has an upper head which the user can turn to screw the radius adjustment screw upwardly and downwardly relative to the nozzle cradle, and wherein the upper head of the radius adjustment screw is received in a flexible portion of a top cover of the nozzle housing to allow the upper head of the radius adjustment screw to tilt back or forth relative to the top cover of the nozzle housing.

77. (original) The rotary sprinkler of claim 76, wherein the top cover is a rubber cover that covers a top wall of the nozzle housing.

78. (original) The rotary sprinkler of claim 77, wherein the flexible portion of the top cover comprises a sec-

tion of the top cover which is separated from a remaining portion of the top cover by a channel and is attached to the remaining portion of the top cover only by a thin membrane which bridges the channel such that the section of the top cover can tilt or flex relative to the remainder of the top cover without distorting of flexing the remaining portion of the top cover.

79. (original) The rotary sprinkler of claim 78, wherein the section of the top cover includes an opening extending therethrough which opening receives a shank of the radius adjustment screw with the shank passing through the opening, and wherein the upper head of the adjustment screw is enlarged relative to the shank of the radius adjustment screw such that the enlarged head of the radius adjustment screw rests on top of the flexible portion of the top cover.

80. (original) A nozzle assembly for a rotary sprinkler in which the nozzle assembly ejects a stream of water to one side of the nozzle assembly as the nozzle assembly is rotated by a rotary drive, which comprises:

(a) a nozzle housing having a top cover;

(b) a nozzle carried in the nozzle housing for ejecting stream of water therefrom, the nozzle being pivotal relative to the nozzle housing to raise and lower the trajectory of the water stream;

(c) a radius adjustment screw that pivots in concert with the nozzle to maintain a fixed relationship to the nozzle after the radius adjustment screw has been adjusted, the radius adjustment screw having a shank and an enlarged head which may be engaged by a tool for adjusting the radius adjustment screw; and

(d) wherein the enlarged head of the radius adjustment screw is received on top of a flexible portion of the

top cover of the nozzle housing to be accessible from above the nozzle housing with the shank of the radius adjustment screw passing down through an opening in the top cover, wherein the flexible portion of the top cover can flex or tilt relative to a remaining portion of the top cover to accommodate the tilting of the shank of the radius adjustment screw that occurs when the trajectory of the water stream is adjusted by pivoting the nozzle.

81. (original) The rotary sprinkler of claim 80, wherein the flexible portion of the top cover is a portion which is isolated from the remaining portion of the top cover by a channel that completely surrounds the flexible portion of the top cover, the flexible portion of the top cover being connected to the remaining portion of the top cover by a thin, flexible membrane which allows the flexible portion of the top cover to flex relative to the remaining portion of the top cover by deformation of the membrane.

82. (original) The rotary sprinkler of claim 81, wherein the flexible portion of the top cover, the remaining portion of the top cover, and the thin membrane are all integrally formed from an elastomeric material.

83. (original) The rotary sprinkler of claim 81, wherein the thin membrane is at a bottom of the channel.

84. (original) A rotary sprinkler, which comprises:

(a) a drive for providing rotation;

(b) a rotary nozzle assembly coupled to the drive for rotation therewith, the rotary nozzle assembly including a water supply tube for bringing a water flow to the nozzle assembly to allow the water flow to be ejected from the nozzle assembly; and

(c) a flow shut off valve having a portion thereof extending into and through at least a portion of the water supply tube, the portion of the flow shut off valve received inside the water supply tube having at least one stream straightening vane located thereon.

85. (original) The rotary sprinkler of claim 84, wherein the portion of the flow shut off valve received inside the water supply tube has a plurality of stream straightening vanes located thereon.

86. (original) The rotary sprinkler of claim 85, wherein the stream straightening vanes are circumferentially spaced apart relative to one another around the portion of the flow shut off valve received inside the water supply tube.

87. (original) The rotary sprinkler of claim 84, wherein the drive provides oscillating, part circle rotation for the nozzle assembly.

88. (canceled)

89. (canceled)

90. (canceled)

91. (canceled)

92. (currently amended) An attachment for a rotary sprinkler having an outer sprinkler body closed by a cap at a top end of the sprinkler body, which comprises:

(a) a member that is configured to be releasably connected to a portion of the sprinkler, wherein the member

is a collar that is sized to slip over the cap at the top end of the sprinkler body, and wherein the collar includes a plurality of resilient latching fingers for latching beneath the cap when the collar is received around the cap to hold the collar to the cap; and

(b) an opening carried on the ~~member~~ collar, the opening being sized to receive an upstanding post or stake provided in the ground such that the ~~member~~ collar, and hence the rotary sprinkler to which the ~~member~~ collar is connected, is supported by the post or stake.

93. (canceled)

94. (canceled)

95. (canceled)

96. (currently amended) The attachment of ~~claim 95~~ claim 92, in which the resilient latching fingers have upwardly extending portions for allowing the fingers to be deflected to release the fingers from their latching engagement beneath ~~to~~ the cap when it is desired to remove the collar from the rotary sprinkler.

97. (currently amended) The attachment of ~~claim 95~~ claim 92, in which the collar includes tabs separate from the latching fingers that engage against a top side of the cap when the latching fingers engage beneath the cap.

98. (currently amended) The attachment of claim 92, in which the opening is a circular opening extending radially outwardly from one side of the ~~member~~ collar.

99. (canceled)

100. (canceled)

101. (canceled)